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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT PAPER NUMBER

2154

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/976,400	Applicant(s) RABBERS ET AL.	
	Examiner Ashok B. Patel	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                                                       |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/02/02, 1/28/02, 4/13/05, 5/5/06</u> | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. Claims 1-32 are presented for examination.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/05/2006 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1, 17, 24 and 27 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-5, 7-13, 15-21 and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Multer et al. (US 6,694,336 B1) in view of Smith et al. (hereinafter Smith)(US 6,502,191 B1), and further in view of Inoue et al. (hereinafter Inoue)(US 6,643,284 B1)

**Referring to claim 9,**

Multer teaches an apparatus comprising:

means for providing binary information for transfer(col. 6, lines 6-8) in synchronizing a server 850 and a synchronization client associated with a handheld device 804 (Fig. 8);

means for compressing the binary information prior to transfer (col. 11, lines 5-8);

means for encoding the binary information according to a protocol associated with a connection between the server and the synchronization client (col. 16, lines 27-30).

Multer does not explicitly teach a means for text encoder encoding the binary information prior to transfer and the size of the binary file is to be based for deciding to its transfer.

Smith teaches a means for text encoding binary information as well as the reasons for why the size of the binary file is to be based for deciding to transfer and the technique how to transfer such an encoded information in col. 33-56," FIG. 1 is a schematic diagram of the system 10 for transmission of data across a firewall and/or proxy server, according to the invention. A document or file, such as a GIF format

image file 12 is stored in a computer 14 that resides in an intranet system. The intranet is protected by one or more firewalls and/or proxy servers 18. In the preferred embodiment of the invention, the computer is a desktop computer. However, in alternate embodiments of the invention, the computer is a server computer.

Some firewalls and proxy servers block HTTP push for non-textual data. Additionally, certain firewalls and proxy servers block HTTP push based on the size of the data. For example, a typical form does not include a significant amount of information to be sent to the server. Thus, the HTTP push size may be restricted to the amount of textual data required, for example, to complete an HTML form.

In the preferred embodiment of the invention, therefore, the sending computer also encodes the binary data to be sent as text, for example using a base-64 encoding. If HTTP push is blocked based on the size of the data, the sending computer will also break the data into smaller packets to comply with the size restrictions. Thus, a binary file is converted to text and broken down by the sending computer into small "text packets" 16.

The client then sends these text packets through one or more firewalls and/or proxy servers 18. The software running on the machine of the sender which attempts to deliver the file across the firewall/proxy server will be referred to as Send Client. The text packets are received by a server 20 outside the firewall which has been configured to accept the text packets. The server reassembles the text packets and converts the text back to the native, binary representation for the GIF file 12."

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Multer and the technique of Smith for the reasons stated by Smith.

It would have been obvious, because as stated by Smith in col. 4, line 56-63, "For those firewalls or proxy servers that block not only the type of data or packet, but also the size, the ASCII text representation of the data must be subdivided into an ordered list of smaller text packets (220). For example, a file of 20 K in binary form, may grow to 30 K once converted to ASCII. Using a fixed packet size of 4 K would yield eight packets to transfer from the Send Client to the Delivery Server, the last packet requiring only 2 K." to ordinary skill in the art to adapt the transfer decision based on the size of binary information.

Both of these references fail to teach a means for deciding an amount of storage available in handheld device to be based for deciding to transfer the information.

Inoue teaches at col.13, line 10-35, " Instead of the case shown in FIG. 11 in which whether or not to transfer the received data to another computer is determined using the predetermined data size as a reference, it is also possible to determine whether or not to transfer the received data in view of the memory capacity that is currently actually available at the radio portable terminal 1 as shown in FIG. 12.

For example, it is possible to carry out the control such that an available memory capacity data 641 with a value  $x$  can be maintained, and if the data size of the received ftp data packets is less than or equal to  $x$ , or less than or equal to  $kx$  where  $k$  is a prescribed coefficient satisfying  $0 < k < 1$ , then the received ftp data packets are stored in

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a memory of the own device, whereas otherwise the received ftp data packet is transferred via the local network to the note PC 8, for example.” (a means for deciding an amount of storage available in handheld device to be based for deciding to transfer the information.)

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to implement the teaching of Inoue into the combined teachings of Multer and Smith such that it is determined whether or not to transfer the data in view of the memory capacity that is currently actually available at the handheld device before the synchronization of a server and the handheld device.

It would have been obvious, because as stated by Inoue at col. 2, line 27-34, “the radio portable terminal (the handheld device) which generally has a compact size is associated with many limitations regarding resources, such as a lack of a display device capable of displaying image data in sufficient resolution, or a lack of ability for mounting a storage device such as memory or disk that can store the large amount of multimedia data, for example.”

**Referring to claim 10,**

Mutter teaches the apparatus of claim 9, wherein the means for compressing binary information comprises a Zip compression utility (col. 13, lines 20-21).

**Referring to claim 11,**

Multer and Smith as applied to claim 9 teach the apparatus of claim 9, wherein the means for text encoding comprises a Base-64 encoder (col. 4, line 50-55).

**Referring to claim 12,**

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Mutter teaches the apparatus of claim 9, wherein the protocol is the hypertext transfer protocol (col. 16, lines 27-30).

**Referring to claim 13,**

Multer teaches the apparatus of claim 9, wherein the binary information comprises database data stored on the server (col. 6, lines 38-43).

**Referring to claim 15,**

Multer teaches the apparatus of claim 9, wherein the binary information comprises transaction information stored on the handheld device (col. 12, lines 8-12).

**Referring to claim 16,**

Multer fails to explicitly teach the apparatus of claim 9, wherein the means for providing binary information to be transferred further comprises means for parsing the binary information into smaller units.

Smith teaches the means for providing binary information to be transferred further comprises means for parsing the binary information into smaller units in col. 33-56," FIG. 1 is a schematic diagram of the system 10 for transmission of data across a firewall and/or proxy server, according to the invention. A document or file, such as a GIF format image file 12 is stored in a computer 14 that resides in an intranet system. The intranet is protected by one or more firewalls and/or proxy servers 18. In the preferred embodiment of the invention, the computer is a desktop computer. However, in alternate embodiments of the invention, the computer is a server computer.

Some firewalls and proxy servers block HTTP push for non-textual data. Additionally, certain firewalls and proxy servers block HTTP push based on the size of



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the data. For example, a typical form does not include a significant amount of information to be sent to the server. Thus, the HTTP push size may be restricted to the amount of textual data required, for example, to complete an HTML form.

In the preferred embodiment of the invention, therefore, the sending computer also encodes the binary data to be sent as text, for example using a base-64 encoding. If HTTP push is blocked based on the size of the data, the sending computer will also break the data into smaller packets to comply with the size restrictions. Thus, a binary file is converted to text and broken down by the sending computer into small "text packets" 16.

The client then sends these text packets through one or more firewalls and/or proxy servers 18. The software running on the machine of the sender which attempts to deliver the file across the firewall/proxy server will be referred to as Send Client. The text packets are received by a server 20 outside the firewall which has been configured to accept the text packets. The server reassembles the text packets and converts the text back to the native, binary representation for the GIF file 12."

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Multer and the technique of Smith for the reasons stated by Smith.

It would have been obvious, because as stated by Smith in col. 4, line 56-63, "For those firewalls or proxy servers that block not only the type of data or packet, but also the size, the ASCII text representation of the data must be subdivided into an ordered list of smaller text packets (220). For example, a file of 20 K in binary form,

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may grow to 30 K once converted to ASCII. Using a fixed packet size of 4 K would yield eight packets to transfer from the Send Client to the Delivery Server, the last packet requiring only 2 K.” to ordinary skill in the art to adapt the transfer by parsing the binary information for transfer (decision based on the size of binary information).

**Referring to claims 1-5 and 7,**

Claims 1-5 and 7 are claims to the process carried out by the apparatus described in claims 9-13 and 15 respectively. Claims 1-5 and 7 are rejected for the same reasons set forth for claims 9-13 and 15.

**Referring to claim 8,**

Claim 8 is a method claim describing the process carried out by the apparatus of claim 16. Claim 8 is rejected for the same reasons as claim 16.

**Referring to claims 17-21,**

Claims 17-21 describe a computer readable medium containing instructions causing a server to carry out the process carried out by the apparatus described in claims 9-13 respectively. Claims 17-21 are rejected for the same reasons set forth for claims 9-13.

**Referring claim 23,**

Claim 23 describes a computer readable medium containing instructions causing a server to carry out the process carried out by the apparatus described in claim 16.

Claim 23 is rejected for the same reasons set forth for claim 16.

**Referring to claims 24 and 25,**

Claims 24 and 25 describe a computer readable medium containing instructions causing a handheld device to carry out the process carried out by the apparatus

described in claims 9 and 15 respectively. Claims 24 and 25 are rejected for the same reasons set forth for claims 9 and 15.

**Referring to claim 26,**

Claim 26 describes a computer readable medium containing instructions causing a handheld device to carry out the process carried out by the apparatus described in claim 16. Claim 26 is rejected for the same reasons set forth for claim 16.

**Referring to claim 27,**

Multer teaches a handheld device (Fig. 8, item 804), comprising: a memory (col. 9 lines 40-42: inherent based on storage of files, programs, data); a local database 824 stored in the memory (Fig. 8);

a user interface (Fig. 8, item 804) coupled to the local database;

a transaction recorder (Fig. 9A, item 950) coupled to the local database, wherein the transaction recorder to record information related to changes made to the local database by a user of the handheld device via the user interface (col. 12, lines 8-10 and 30-35); and a data importer (Fig. 8, item 864) coupled to the local database, wherein the data importer is to decompress database data (col. 11, lines 5-8) receivable from a separate computing device 850 to synchronize the local database with the separate computing device, the database data being binary information that the separate computing device:

compressed prior to transfer (col. 11, lines 5-8),

encoded according to a protocol associated with a connection between the separate computing device and the handheld device prior to transfer (col. 16, lines 27-30).

Multer does not explicitly teach a means for text encoder encoding the binary information prior to transfer and the size of the binary file is to be based for deciding to its transfer.

Smith teaches a means for text encoding binary information as well as the reasons for why the size of the binary file is to be based for deciding to transfer and the technique how to transfer such an encoded information in col. 33-56," FIG. 1 is a schematic diagram of the system 10 for transmission of data across a firewall and/or proxy server, according to the invention. A document or file, such as a GIF format image file 12 is stored in a computer 14 that resides in an intranet system. The intranet is protected by one or more firewalls and/or proxy servers 18. In the preferred embodiment of the invention, the computer is a desktop computer. However, in alternate embodiments of the invention, the computer is a server computer.

Some firewalls and proxy servers block HTTP push for non-textual data. Additionally, certain firewalls and proxy servers block HTTP push based on the size of the data. For example, a typical form does not include a significant amount of information to be sent to the server. Thus, the HTTP push size may be restricted to the amount of textual data required, for example, to complete an HTML form.

In the preferred embodiment of the invention, therefore, the sending computer also encodes the binary data to be sent as text, for example using a base-64 encoding. If HTTP push is blocked based on the size of the data, the sending computer will also break the data into smaller packets to comply with the size restrictions. Thus, a binary

file is converted to text and broken down by the sending computer into small "text packets" 16.

The client then sends these text packets through one or more firewalls and/or proxy servers 18. The software running on the machine of the sender which attempts to deliver the file across the firewall/proxy server will be referred to as Send Client. The text packets are received by a server 20 outside the firewall which has been configured to accept the text packets. The server reassembles the text packets and converts the text back to the native, binary representation for the GIF file 12."

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Multer and the technique of Smith for the reasons stated by Smith.

It would have been obvious, because as stated by Smith in col. 4, line 56-63, "For those firewalls or proxy servers that block not only the type of data or packet, but also the size, the ASCII text representation of the data must be subdivided into an ordered list of smaller text packets (220). For example, a file of 20 K in binary form, may grow to 30 K once converted to ASCII. Using a fixed packet size of 4 K would yield eight packets to transfer from the Send Client to the Delivery Server, the last packet requiring only 2 K." to ordinary skill in the art to adapt the transfer decision based on the size of binary information.

Both of these references fail to teach "deciding an amount of storage available in the local database to be based for deciding to transfer the information".

Inoue teaches at col.13, line 10-35, " Instead of the case shown in FIG. 11 in which whether or not to transfer the received data to another computer is determined using the predetermined data size as a reference, it is also possible to determine whether or not to transfer the received data in view of the memory capacity that is currently actually available at the radio portable terminal 1 as shown in FIG. 12.

For example, it is possible to carry out the control such that an available memory capacity data 641 with a value  $x$  can be maintained, and if the data size of the received ftp data packets is less than or equal to  $x$ , or less than or equal to  $kx$  where  $k$  is a prescribed coefficient satisfying  $0 < k < 1$ , then the received ftp data packets are stored in a memory of the own device, whereas otherwise the received ftp data packet is transferred via the local network to the note PC 8, for example." ("deciding an amount of storage available in the local database to be based for deciding to transfer the information")

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to implement the teaching of Inoue into the combined teachings of Multer and Smith such that it is determined whether or not to transfer the data in view of the memory capacity that is currently actually available at the handheld device before the synchronization of a server and the handheld device.

It would have been obvious, because as stated by Inoue at col. 2, line 27-34, "the radio portable terminal (the handheld device) which generally has a compact size is associated with many limitations regarding resources, such as a lack of a display device capable of displaying image data in sufficient resolution, or a lack of ability for

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mounting a storage device such as memory or disk that can store the large amount of multimedia data, for example.”

**Referring to claim 28,**

Multer teaches the handheld device of claim 27, wherein binary information compressed using a Zip compression utility (col. 13, lines 20-21).

**Referring claim 29,**

Multer and Smith as applied to claim 27 teach the handheld device of claim 27, wherein the text encoder comprises a Base-64 encoder (col. 4, line 50-55).

**Referring claim 30,**

Multer teaches the handheld device of claim 27, wherein the protocol is the hypertext transfer protocol (col. 16, lines 27-30).

**Referring to claim 31,**

Multer teaches the handheld device of claim 27, wherein the binary information comprises database data stored on a server (col. 6, lines 38-43).

6. Claims 6, 14, 22, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Multer, Smith and Inoue as applied to claims 9 and 27 above further in view of Salas et al. (US Patent 6,233,600 filed 7/15/1997) (hereinafter Salas).

**Referring to claim 14,**

Multer fails to explicitly teach the apparatus of claim 9, wherein the binary information comprises metadata stored on the server.

Salas teaches that the binary information comprises metadata stored on the server (col. 12, lines 52-54).

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Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mutter and Salas to transfer metadata from the server when synchronizing with a client. One of ordinary skill in the art would have been motivated to transfer metadata so that can identify the application to be used to operate on binary data transferred from the server (See Salas, col. 12, lines 54-59).

**Referring to claim 6,**

Claim 6 is a method claim describing the process carried out by the apparatus of claim 14. Claim 6 is rejected for the same reasons as claim 14.

**Referring to claim 22,**

Claim 22 describes a computer readable medium containing instructions causing a server to carry out the process carried out by the- apparatus described in claim 14.

Claim 22 is rejected for the same reasons set forth for claim 14.

**Referring to claim 32,**

Mutter fails to explicitly teach the handheld device of claim 27, wherein the binary information comprises metadata stored on a server. Salas teaches that the binary information comprises metadata stored on the server (col. 12, lines 52-54).

Therefore, It would have been obvious to one of ordinary skill in this art at the time the invention was made to combine the teaching of Mutter and Salas to transfer metadata from the server when synchronizing with a client. One of ordinary skill in the art would have been motivated to modify the handheld unit taught by Salas to transfer



metadata so that the handheld user can identify the application to be used to operate on binary data transferred from the server (See Salas, col. 12, lines 54-59).

### ***Conclusion***

**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp

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